

WHAT IS CLAIMED IS:

- 1 1. A method for the contactless recognition of an object in a monitored
2 region comprising illuminating the object with coherent light and evaluating light reflected by
3 the object by employing an interference pattern.
- 1 2. A method according to claim 1 including directing the coherent light
2 through at least one of a beam splitter, a collimator and an optical system.
- 1 3. A method according to claim 1 including generating the interference
2 pattern with the coherent light and the light reflected by the object, and comparing the
3 interference pattern with a desired interference pattern.
- 1 4. A method according to claim 3 including providing the coherent light
2 illuminating the object from one of a separate coherent light source and a beam splitter which
3 diverts a portion of the coherent beam from the light source.
- 1 5. A method according to claim 1 including superimposing the reflected
2 light over a desired interference pattern to thereby generate diffracted light, and measuring an
3 intensity of the diffracted light.